Principals’ Building Collaborative Cultures on Academic Performance of Secondary Schools in Kisumu County

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Abstract

The study arose from the fact that, high school principals are working hard yet the academic performance of public secondary schools in Kisumu County has remained generally poor. Between 2014 and 2018, only 26.9% of students from Kisumu County scored at least C+, and the average mean score in KCSE for the period was only 4.23, below 7.0, the entry marks. At least 65% of the KCSE candidates from Kisumu County did not proceed to university education during the period. Several educational stakeholders had linked school leadership to poor academic performance, but without empirical evidence. The study specifically investigated the influence of Principals’ building collaborative cultures on academic performance of secondary schools in Kisumu County. The study adopted a survey research design. The target population consisted of 204 principals, 2,196 teachers, and 13,213 Form Three students. In sampling, Krejcie and Morgan table was used to find 152 principals, 333 teachers and 378 students, from 152 schools. Data were collected using questionnaires, interviews, observation and document analysis, and analyzed using simple linear, simple correlation, stepwise regression with dummy variables, at a.05 level of significance. The study tested a specific hypothesis that Principals’ building collaborative cultures has a significant influence on academic performance of secondary schools in Kisumu County. Building collaborative cultures (good) [F (2,149) = 2.818, p = .009, R²adj = .024, t (149) = 2.362 p = .018] has significant influence on academic performance of secondary schools in Kisumu county. The study recommends that the ministry of education should empower principals with resources that will enable them to empower their teaching staff by training them on various needs that may arise in the society from time to time, and since the society is dynamic continuous provision of resources by the ministry would be ideal.

Keywords: Principals, building, collaborative, cultures, academic, performance, Kenya.

BACKGROUND OF THE STUDY

Ordinarily, building collaborative cultures helps in creating a useful network among academic collaborators. The work of Overstreet, (2017) defined as a leadership practice of building collaborative cultures as one that involves the followers in an attempt to transcend self-interest for the sake of the team. In this respect, (Chew et al, 2018) emphasized that building collaborative cultures are concerns that increase organizational members’ commitment, capacity, and engagement in meeting goals. Since transformational leadership has several benefits, building collaborative cultures are academic friendly (Castanheira et al, 2011); (Rutledge II, 2010), (Shava et al, 2018).

Principal’s building collaborative cultures on academic performance of secondary schools, as put forward by Overstreet (2017) has several benefits over the conventional models, but nevertheless, its application by principals of schools in Kenya has not been exhaustively investigated.. The public continue to demand that school principals improve students’ achievements in the national examinations, the ‘how’ puzzle is still missing (Fisher 2018:7).

In Kenya, the work of (Achiyo et al, 2020) together with the Kenya Vision 2030 lays a great importance on the link between the education sector and the labor market. One of the objectives of secondary education in Kenya, being monitored by the government of Kenya (GOK) is to build a firm foundation for further education and training (GOK, 2012). The Kenya Certificate of Secondary Education examination (KCSE) is the yardstick to further education and training. Performance in the KCSE is very significant, because it determines the placement of students in the Kenyan universities.
students into tertiary institutions and universities within or out of Kenya. A student is considered to have performed well if they attain at least a grade C+ (plus). This is the basic grade for university admission. Grade of C plain and C- (minus) are average performance while a grade D and below is poor performance. The letter grade points are summarized as obtained from the Kenya National Examinations Council (KNEC) in Table 1.

### Table 1: KNEC Grading Structure

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B-</th>
<th>C+</th>
<th>C-</th>
<th>D+</th>
<th>D-</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

**Source: KNEC 2015**

From the grade points and based on the minimum subject allowed and other conditions considered, the minimum pass points are 7 in 8 subjects and the maximum 12 points in 8 subjects. In the Ministry of Education (MOE), National Education Sector Strategic Plan 2018 – 2022, results from students’ assessment shows that learning achievements remain quite low. The numbers of students achieving a mean grade of C+ and above has been decreasing. A majority has been scoring grades that cannot allow them proceed to higher education and pursue employment despite the government spending billions to subsidize their education (MOE 2019). The 2018 - 2022 strategic plan notes that an efficient and effective secondary education means that all actors are aligned towards the goal of students learning. While the performance in KCSE has generally been poor across Kenya, there are also significant variations across regions. Building collaborative cultures has been believed to fill this vacuum. The performance in KCSE in Kisumu County between 2014 and 2018 stood at the average mean score of 4.23 (Kisumu Country Education Office, 2019). This was still far below the requirements of Kenya Universities and Colleges Central Placement Service (KUCCPS) for transition to universities and colleges. KUCCPS require students to score an average of 7.0 or C+ for placement in the university or 6.0 or C for placement in colleges. Between 2014 and 2018, only 26.9% of students from Kisumu County obtained the minimum KUCCPS’s requirements for admission to colleges and universities, leaving out 73.1% of students who are unaccounted for in terms of further training. The performance in KCSE for secondary schools in Kisumu County is highlighted in Table 2.

### Table 2: Kisumu County KCSE Performance Trend 2014 – 2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Entry</th>
<th>Mean score</th>
<th>% ≥ C</th>
<th>% &lt; C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>9,921</td>
<td>4.6</td>
<td>67.56</td>
<td>32.44</td>
</tr>
<tr>
<td>2015</td>
<td>10,970</td>
<td>4.7</td>
<td>62.98</td>
<td>37.02</td>
</tr>
<tr>
<td>2016</td>
<td>12,188</td>
<td>3.657</td>
<td>87.58</td>
<td>12.42</td>
</tr>
<tr>
<td>2017</td>
<td>12,412</td>
<td>4.025</td>
<td>82.33</td>
<td>17.67</td>
</tr>
<tr>
<td>2018</td>
<td>12,781</td>
<td>4.159</td>
<td>80.84</td>
<td>19.16</td>
</tr>
</tbody>
</table>

**Source: County Education Office Kisumu (2019)**

Over the period 2014-2018 the mean score dropped from 4.6 to 4.159. This was rather low as compared against the heavy investment in education in the County, and in the country as a whole. Over the period under study most of students (76.258%) did not obtain the minimum grade to for university education. The mass failure has risen questioned on government’s hyped plan to achieve 100% transition from primary to secondary school (Onyango et al, 2020).

As (Okeowo, 2015) reports, some schools have been closed after students went on rampage when their schools posted poor KCSE results, and parents accused principals of sleeping on the job. In his assessment, school leadership plays a major role in the poor performance in KCSE. Furthermore, as (Onyango et al, 2020) reported results of poor performance in KCSE, some principals have been transferred from county schools to sub county schools while others have been deployed as assistant teachers. In their opinion, Teachers Service Commission (TSC) concern was the students and principals were to be blamed for the poor performance. From the reaction of the public, the MOE, and TSC have acknowledged that school leadership play a pivotal role in KCSE performance (Yambo, 2012). Moreover, (Okoth et al, 2016) opined that schools perform quite differently when they are lead or managed by different principals with varied different levels of experience and leadership skills. Therefore, it was vital to find out how the practices of leadership of principals’ influence students performances.

### Statement of the Problem

The main purpose of secondary education has been to build a firm foundation for further education and training, provision of the labor market which is depicted in the Kenya’s Vision 2030 as the key mechanisms for transforming the country into a middle-income economy. However, this dream can only be achieved if learning outcomes in secondary school can
enable a critical mass of students to transit to tertiary education. In this regard, the government has heavily subsidized secondary education with Day Scholars learning for free. Other stakeholders and educational development partners have also supported in provision of infrastructure and facilities to schools. Principals have also undergone management courses including building collaborative cultures. Despite these efforts, academic performance of public secondary schools in Kisumu County has remained generally poor. Between 2014 and 2018, only 26.9% of students from Kisumu County scored at least C+, which is the minimum entry requirement for university admission. The average mean score in KCSE examinations in secondary schools in Kisumu County in the period was only 4.23 which is below 7.0, the cut out entry set by KUCCPS. At least 65% of the candidates from Kisumu County did not proceed to university education during the period under study, as shown in Table 2.

Educational stakeholders have blamed principals for the poor academic performance (Chen, 2014). While the poor performance in secondary schools in Kisumu County is not in doubt, and while several reasons would be in play, the influence of leadership style, and probably the influence of transformational leadership on the performance of schools in Kisumu County had not been investigated. This therefore, necessitated a need to establish the influence of building collaborative cultures on students’ academic performance in public secondary schools in Kisumu County.

Research Question
What is the influence of principals’ building collaborative culture on academic performance of secondary schools in Kisumu County?

Hypothesis
H01: Building collaborative culture by the principal is not a significant predictor of the academic performance of secondary schools in Kisumu County.

Theoretical Framework
This study was guided by the Transformational Leadership Theory (TLT). The TLT was developed by Burns in 1978 (Burn, 1978) in the examination of political leaders. According to Burns, transformational leaders are individuals who engage their followers in raising one another to higher levels of motivation and morality. Burns believes that transformational leadership could raise followers from a lower degree to a higher degree of needs on this Burns concurred with Maslow’s hierarchy of needs (Maslow, 1954). A transformational leader inspires positive changes in the followers. According to (Bass, 1985) the motivation could be achieved by raising the awareness level of the followers on the importance of organizational outcomes and ways to achieve them. The TLT theory recognizes the four leadership behaviors that increase subordinates’ motivation.

Further, in educational cycles (Leithwood, 2010), advanced the TLT and aligned these behaviors to four practices: setting Directions, developing people, building collaborative cultures and staffing the program. As applicable to this study, the researcher considered building collaborative cultures and related to academic performance. Consequently, in the current study, principals as lead educators can influence their followers, (teachers and students) into achieving schools’ objectives by creating visions and continuously articulating the vision to teachers and students. Academic performance can be measured through the performance of students in the summary examinations like KCSE. Several scholars like Rutledge II (2010), (Leithwood et al, 2012), (Mehdi, 2018), (Valentine et al, 2011) confirmed in their studies that transformational theory had positive effects on transforming schools leading to increased students and teachers’ performance, this made it suitable for the study. However, a major weakness of this theory was that all the practices of transformational leadership style were pivoted on the leader of an organization, much emphasis was on the leader and how his or her individual actions contributed to school performance.

Building Collaborative Cultures by Principals on Students’ Academic Performance
Building collaborative culture generally entails working as a team to achieve the objectives of an organization. According to (Foster et al, 2019) this is where the principal and teachers work together, supporting each other, and dialoguing in case there is a problem. Building a collaborative culture is one of the practices of transformational leadership (Leithwood, 2010) identified as more useful. Principals should establish a comprehensive team work plan as it is their responsibility to build a working force that drives the school objectives forward. The work of (Kelley et al, 2017), (Leithwood, 2010) define building collaborative cultures as a practice that requires establishing a school culture, modifying the organizational structures, building productive relationship with teachers, students, parents, school management boards and communities linking the school to its wider environment. Principals should endeavor to build a collaborative culture with the teachers, parents and students if the school is to meet its academic targets. While the work of (Sunda et al, 2018); (Foster et al, 2019) dealt with college and university principals, the current study dealt with high school principals to fill the research gap.

In a study on teacher commitment in secondary schools of Sarawak, Malaysia, using a quantitative survey method, (Suraya et al, 2018); (Ling et al, 2018) found that teachers perceived a fairly high level of ‘idealized influenced’ from the principals. They concluded that idealized leadership enhances teachers’
commitment. However, the study did not consider the students’ performance. The current study however, considered students’ academic performance in secondary schools to fill the research gap.

According to (Bolthouse, 2013) high school principals who foster effective collaboration among their staff elevate the level of their students’ learning. This happens because the staff would support the principal in molding the students to achieve, the schools’ objectives. In addition to this, (Taylor, 2017) established that student achievement in school does improve as the school culture centers on student learning. When students are well cultured they tend to concentrate in positive activities as enshrined in the school policies, rules and regulations. Most of their energies are therefore spent on activities that enhance and boost their learning.

In Portugal, the work of Fisher (2018) opined that in building collaborative cultures, a principal must inculcate suitable environment for the optimum achievement of school goals and objectives. School culture include all the expected behavior, values and attitude that impact on how a school operates (Bolthouse, 2013). It is the environment within which the school operates. A school principal should work with teachers and parents in developing a positive climate for students to work towards a common goal. According to Griffith (2014), school culture is the personality of a school or the quality and character of a school-based on goals or values. In addition, Sahin (2012) reiterated that the creation and maintaining of a school culture are strongly dictated by the school administrator. Every single school has a climate unique to it, and within each climate students’ achievement varies. A meta-analysis by Bektas, Cogaltay, Karadag and Ay (2015) found that school culture had a statistically significant effect on students’ academic achievement.

On building a collaborative culture and academic achievement in Perak secondary schools in Malaysia, Suraya and Yunus (2018) found that a constructive school culture contributes to effective learning and teaching, thereby enhancing academic achievement. This study was done only in two urban schools in Perak state, with one school considered a high performer and the other low performer. The respondents in the study were students. The research instrument used was only a questionnaire. However, the current study was conducted in Kisumu county which has both urban and rural schools, the study was interested in all the schools regardless of their performance in KCSE, the current study used questionnaires, interviews, document analysis and observation for triangulation and the respondents were drawn from principals, teachers and students to fill the research gap.

In South Africa, a study by Moroqo (2018) in Maseru, Lesotho on the influence of educational leaders on school culture affecting academic performance, found that schools where principals’ do more nurturing, school culture performed better than schools where the principals did not nurture school culture. Additionally, (Elbousty et al, 2017) worked on a case study dealing with teachers’ attitude towards collaboration and found that as teachers work collectively, they share different views and practice which make a collaborative environment useful and productive. More studies from East Africa especially Uganda and Tanzania by (Nsabuga, 2010), (Nyagiati et al, 2018) equally emphasized that well cultivated school cultures and harnessed teachers collaboration yields desirable academic results.

In Kenya, research done by (Sunda et al, 2018) on leadership skills employed by principal on students’ academic performance in public teachers training colleges where they used an ex-post facto research design. The teachers’ colleges were found to have a long time cultivated collaborative cultures with other teachers training colleges in the region (Okoth et al, 2016). Similarly, it was equally found out in the the work of (Achiyo et al, 2020) that students of a particular age, especially girls did more collaboration in their academic endeavours where they share more information for their progress. The same sentiments were echoed by (Onyango et al, 2020), (Yambo, 2012) who pointed out that collaborative cultures build around academic matters eventually led to good and desired academic outcome.

**RESEARCH METHODOLOGY**

This study employed a cross sectional survey research design. According to (Orodho, 2008) a target population is a hypothetical population from which the data is collected. The target population for this study was all the 204 public secondary schools in Kisumu County (County Director of Education, Kisumu County (CDE) (2015) The 204 principals, 2,196 teachers, and 13,213 Form Three students (CDE, Kisumu County, 2015. The sample consisted of 152 public secondary schools in Kisumu County. The sample was determined according to Krejcie and Morgan Tables of samples, as cited in (Oso, 2016) Krejcie and Morgan. The table recommends a sample of 152 for a population of 204 at 95% level of confidence and 5.0% margin of error. The sample of 152 schools was made of 2 national schools, 22 county and 128 sub-county schools. The respondents were made up of all 152 principals, the number of teachers and students were also selected using Krejcie and Morgan Tables. The number of teachers was 333 teachers while students were 378 students. The study employed an in-depth interview schedule, questionnaires, document analysis and observation checklists as the main instrument for data collection. The qualitative method for data collection was necessary for triangulation purposes.
DATA ANALYSIS AND DISCUSSION

Influence of Building Collaborative Cultures by Principals and Academic Performance Building collaborative culture was measured from school culture, modification of organizational (school) culture and collaborative processes. Data collected on these variables were manipulated as summarized in Table 3.

Table 3: Academic Performance of Schools against Building Collaborative Culture by Principal

<table>
<thead>
<tr>
<th>Building Collaborative Cultures</th>
<th>School Mean Score</th>
<th>N</th>
<th>SD</th>
<th>N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>5.408</td>
<td>41</td>
<td>1.567</td>
<td>26.9%</td>
</tr>
<tr>
<td>Moderate</td>
<td>5.007</td>
<td>101</td>
<td>1.142</td>
<td>66.4%</td>
</tr>
<tr>
<td>Poor</td>
<td>4.455</td>
<td>10</td>
<td>0.744</td>
<td>6.7%</td>
</tr>
<tr>
<td>Total</td>
<td>5.079</td>
<td>152</td>
<td>1.267</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 3 shows the status of building collaborative culture, school performance (means score), standard deviation and the percentages of principals within each category of building collaborative culture. The table shows that 26.9% of the schools had principals who were good on building collaborative culture, and had a higher academic performance (M = 5.408, S = 1.567) while 6.7% of the schools had principals who were poor on building collaborative culture. They had a lower (M = 4.455, S = 0.744) academic performance. A majority (66.4%) of the school principals rated moderate on building collaborative culture with an average performance of M = 5.007, S = 1.142. It was deduced from the data that principals of secondary schools in Kisumu County are generally poor in building collaborative culture; this could explain the lower academic performance of the schools. This finding was supposed by (Bektas et al., 2015) who posited that inadequate collaboration by key stakeholders could result in poor output.

Examination of the mean scores in the second column of Table 3 shows that schools whose principals were good at building collaborative culture had higher academic performance (M = 5.408, S = 1.567) than schools whose principals were moderate on building collaborative culture M = 5.007, S = 1.142. It was also higher than the performance of schools whose principals were poor at building a collaborative culture, M = 4.455, S = 0.744. Therefore, the performance of schools depended on building collaborative culture by the principals, and the better the principal was at building a collaborative culture, the higher the academic performance of the school. This pointed to the fact that building collaborative culture by the principals influences the academic performance of schools. The data on building collaborative culture and academic performance was further analyzed to determine if building collaborative culture has a significant influence on academic performance of the school. The analysis was performed under the null hypothesis that: Building collaborative culture by the principal is not a significant predictor of the academic performance of secondary schools in Kisumu County.

H₀: R²P=BCC.G, BCC.P = 0
Hₐ: R²P=BCC.G, BCC.P ≠ 0

Where P = academic performance, BCC-G = building collaborative culture-good and BCC-P = building collaborative culture-poor.

The hypothesis was tested using simple linear regression with categorical variables of building collaborative culture. The results of the analysis are summarized in Table 4.

Table 4: Regression of Academic Performance on Building Collaborative culture

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>R</th>
<th>R²</th>
<th>R²adj</th>
<th>Std. β</th>
<th>F</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.008</td>
<td></td>
<td>.125</td>
<td>.40.186</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCC-G</td>
<td>.400</td>
<td></td>
<td>.232</td>
<td>2.362</td>
<td>.018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCC-P</td>
<td>-.552</td>
<td></td>
<td>.415</td>
<td>-1.330</td>
<td>.186</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model summary</td>
<td>.191</td>
<td>.036</td>
<td>.024</td>
<td>.232</td>
<td>2.232</td>
<td>.009</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. BCC-G = Good Building Collaborative Culture, BCC-P = Poor Building collaborative culture, DV= Academic performance.

Table 4 summarizes the basic regression results of academic performance on building collaborative culture by principals. The overall analysis of the F statistic shows that there is an overall regression at effect, F (2,149) = 2.232, p = .009. Therefore, a regression model exists, and at least one element of building collaborative culture is a significant predictor of the academic performance of the schools. Further analysis of the individual categories of building collaborative culture shows that BCC-G is significant in the model, t (149) = 2.362, p = .018. But BCC-P is not a significant predictor in the model, t (149) = -1.330, p =
Consideration of transformational leadership (Bolthouse, 2013) indicates that they play a great role, by leading the way. Though Bolthouse (2013) added that the school culture develops in line with student’s manners and discipline. The principals explained that they emphasize on norms of excellence for teachers and students. Some principals said that they have been able to build the school culture by using slogans and motivational phrases repeatedly. Others said they continually communicate the school visions publicly whenever there is opportunity. As one principal commented, “We struggle to bring up responsible students; I believe that a disciplined student can succeed academically” (interview). Another one said, “The school has rules and regulations to help in molding responsible students” (interview). Students’ responses from quantitative data supported principals’ views at building collaborative cultures. But teacher’s responses did not fully support the position. As on the actual analysis, only 6.7% of the schools had principals who were good on building collaborative cultures. All principals interviewed felt that conductive environment was necessary for optimum academic performance.

On collaborative school culture, a majority of principals (81.8%) felt that they work together as a team in ensuring that students perform better in KCSE examinations. They stated that they also involve parents, and most of them conceived that good performance is a shared responsibility as was supported by (Shava et al., 2018) who lauded collaboration and teamwork. From the interview data, it was clear that most principals believe they are building collaborative cultures in their schools. A majority (53.7%) of the principal were generally of the view that building collaborative culture contributes positively to students’ performance in KCSE. Their position supports the findings from quantitative data that building collaborative cultures has a significant effect on academic performance.

During the observation, it was noted that only 30% of the schools visited had talking walls, which could communicate to any visitor to the school the ethos of the school. But in 70% of the schools, it was difficult to know whether they had they had a culture just by walking into the school. Generally, 93% of the schools had a conductive learning/teaching environment, but on closer observation, in most of the classrooms classes were congested.

Building collaborative cultures, therefore, as advanced by (Moss et al., 2017) was a basis for establishing a productive culture, fostering participative decision making, and building good relations do stand. In any case, such virtues are necessarily turned into improved academic achievement.

**CONCLUSION**

Transformational leadership practice was measured by building collaborative culture. Academic performance was measured from mean score of schools...
between 2014-2018. The study found that elements of transformational leadership practice especially building collaborative culture, \[ F(2,149) = 2.232, p = .009 \] had a significant influence on academic performance. However, study also found that the elements of transformational leadership practice was significant when taken together on academic performance, \[ F(8,143) = 2.565, p = .041 \].

**RECOMMENDATIONS**

On building collaborative cultures, the study recommends that educational management course offered by Kenya Education Management Institute (KEMI) and other education and career providers to incorporates units on building collaborative cultures like setting a school culture building collaborative process principals and educational innovation so to that they are able to develop new and unique ways to solve common educational problems that they encounter every day. In this way, they will be able to improve their organizations hence attain positive outcomes.

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